

Remarks

The cross-reference to the parent applications previous inserted by Preliminary Amendment has been updated to indicate the abandoned status of the immediate parent application.

The other amendments, to the claims and abstract, address objections and rejections set forth in the Office Action of September 24, 2003 in the immediate parent application.

Thus, original claims 1-16 have been replaced by new claims 17-24.

New claim 17 corresponds to a combination of original claims 1, 2 and 4.

New claim 21, which is the only other independent claim, corresponds to a combination of original claims 1, 2 and 5.

New claims 18 and 22 correspond to original claim 3.

New claims 19, 20, 23 and 24 correspond to original claim 6.

The abstract has been rewritten in single paragraph format, and also to make minor editorial changes.

Applicant notes that the claim amendments will avoid the rejection of claims 1-3, 6 and 12-16 under 35 U.S.C. §102(b) as being anticipated by Kawamata, as well as the rejection of claims 7-11 under 35 U.S.C. §102(b) as being anticipated by Onishi et al. and the rejection of claims 7-11 under 35 U.S.C. §102(b) as being anticipated by Sekimura et al. or Takao et al., set forth in the Office Action of September 24, 2003. None of these rejections include claims 4 and 5, which as indicated above, have been incorporated into new claims 17 and 21, respectively.

The other prior art rejection set forth in the Office Action is that of claims 1-6 and 12-16 under 35 U.S.C. §102(e) as being anticipated by Anderson et al.

However, Applicant notes that the Anderson et al. reference does not disclose or suggest anything about a low-reflective thin-film substrate comprising a thin film which is formed in multilayer by using alloys of the metals disclosed in the original claims 4 and 5.

Respectfully submitted,

Tadakatsu SUZUKI

By:

A handwritten signature in black ink, appearing to read "Michael R. Davis", written over a horizontal line.

Michael R. Davis

Registration No. 25,134

Attorney for Applicant

MRD/pth
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
June 18, 2004

ABSTRACT

~~———— A low-reflective thin-film substrate comprising a transparent glass substrate having formed by sputtering a thin film in multilayer containing no chromium series component and made up of at least one kind of Ni, Fe, Co, Mo, W, Ta, Cu, and Nb as a main constituent form or as an alloy thereof, the thin film having a minimum reflectivity of 0.5% or lower and the optical density of at least 4 or having a minimum reflectivity of 0.1% or lower, a maximum reflectivity of 2.0% or lower, an average reflectivity of 0.3% or lower, and an optical density of at least 4.0, in the visible light region.~~

~~———— The low-reflective thin-film substrate is useful as a black matrix for a color filter substrate of a liquid crystal panel, etc., and is free from an environmental pollution caused by the use of a chromium component as the target material.~~

ABSTRACT

A low-reflective thin-film substrate comprising a transparent glass substrate formed by sputtering a thin film in multilayer containing no chromium series component and made up of at least one kind of Ni, Fe, Co, Mo, W, Ta, Cu, and Nb as a main constituent form or as an alloy thereof, the thin film having a minimum reflectivity of 0.5% or lower and an optical density of at least 4 or having a minimum reflectivity of 0.1% or lower, a maximum reflectivity of 2.0% or lower, an average reflectivity of 0.3% or lower, and an optical density of at least 4.0, in the visible light region. The low-reflective thin-film substrate is useful as a black matrix for a color filter substrate of a liquid crystal panel, etc., and is free from environmental pollution caused by the use of a chromium component as the target material.